

AREA EFFICIENT STACKING OF ANTIFUSES

IN SEMICONDUCTOR DEVICE

Abstract of the Disclosure

A semiconductor device is provided which is formed of a
5 wafer having on a surface thereof an area efficient arrangement
of at least two antifuses in vertically stacked relation and
sharing a common intermediate electrode therebetween. The
arrangement includes at least one lower antifuse having a lower
counter electrode and a lower fusible insulator portion defining
10 a lower fuse element of an initial high electrical resistance
state which interconnects the lower counter electrode with the
common intermediate electrode, and at least one upper antifuse,
which may be the same as or different from the lower antifuse,
the upper antifuse having an upper counter electrode and an upper
45 fusible insulator portion defining an upper fuse element of an
initial high electrical resistance state which interconnects the
upper counter electrode with the common intermediate electrode.